



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: AE3007A1/1
 UNIQUE ID NUMBER: 6AL009
 COMBUSTOR: Type 2
 ENGINE TYPE: MTF

BYPASS RATIO: 4.8
 PRESSURE RATIO (π_{00}): 17.9
 RATED THRUST (F_{00}) (kN): 34.7

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	16.4	84.5	53.1	0.0
AS % OF ORIGINAL LIMIT	83.8	71.6	70.1	0.0
AS % OF CAEP/2 LIMIT (NO _x)			87.6	
AS % OF CAEP/4 LIMIT (NO _x)			90.1	
AS % OF CAEP/6 LIMIT (NO _x)			91.3	
AS % OF CAEP/8 LIMIT (NO _x)			97.6	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
 x DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	0.381	0.00	0.00	22.31	0.0
CLIMB OUT	85	2.2	0.316	0.00	0.00	19.49	0.0
APPROACH	30	4.0	0.113	0.18	1.40	7.16	0.0
IDLE	7	26.0	0.046	5.10	32.84	3.19	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			156	370	2389	1592	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				10.7	68.8	45.8	0.0
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	99.6-99.7
TEMPERATURE (K)	297-301
ABS HUMIDITY (kg/kg)	0.0115-0.0141

FUEL

SPEC	Jet A
H/C	1.9
AROM (%)	16-20

MANUFACTURER: Rolls-Royce Corporation
 TEST ORGANIZATION: Rolls-Royce Corporation
 TEST LOCATION: Indianapolis, Indiana
 TEST DATES: 28/08/2002-29/08/2002

REMARKS

- For effectivity see Rolls-Royce Notice to Operators No. AE3007A-076
- Data in this form for A3007A1/1 fitted with PAB fuel nozzles
- Results based on Rolls-Royce report EDR 19972

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)